Gruits and Nuts_

Landscaping with Fruit & Nut Crops

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Fruit and nut crops may be valuable additions to the landscape if proper attention is paid to crop selection, site preparation and cultural practices following planting. By adequately addressing these points, an edible landscape may become a reality. The following guidelines will assist you in determining which fruit and nut crops to use and where to plant them to meet your landscape objectives.

Shade Trees — Not only do shade trees provide a pleasant place to rest and enjoy the outdoors, but, when planted on the south to southwest sides of a house, they may reduce the energy required to cool the house during hot summer days. Standard size fruit trees and nut trees work well in this type of setting. Keep in mind that these trees will reach a fairly large size. Be sure to leave adequate room for future growth.

Nut Trees — Pecan, Chinese chestnut, black walnut and hazelnut trees grow and produce quite well in Tennessee. Pecan and black walnut trees are long-lived and will grow to be very large when properly cared

for. Grafted trees of known varieties will begin to bear fruit more quickly than seedling trees. Best production results from cross pollination with another variety of the same type of tree.

Apples — Plant trees having a standard (seedling) rootstock or one of the larger semi-dwarf rootstocks to get large trees. Plant two or more varieties of apples to assure good cross pollination. Consider selecting some of the disease-resistant varieties such as Liberty.

Pears — While pear trees may get quite tall, limb spreading may be necessary to promote lateral growth, thus increasing the shaded area under them. Select varieties such as Keiffer, Seckel, Ayers, Moonglow, Starking Delicious or other varieties showing fireblight resistance. All varieties of pears fruit better with cross pollination.

Plum — Lower limbs on plum trees may need to be removed to provide room to move around under the tree canopy. Most plum varieties need cross pollination from another variety for good production. Spring frosts will be a frequent problem, as most plum varieties



bloom early. Stanley, a prune-type plum, blooms later than most other plum varieties and does not need to be cross pollinated by another variety to have good fruit.

Peach, Nectarine — Select and develop scaffold limbs high enough off the ground to allow movement under the trees. Choose varieties with showy blooms. Peaches and nectarines bloom early enough that spring frost may be a problem. Essentially, all peach and nectarine varieties have self-fertile blossoms, so only one variety is needed.

Persimmon — Choose cultivars with large fruit, and which bear fruit at an early age. Both American and Oriental types will grow and fruit in Tennessee. Oriental varieties are frequently grafted on an American persimmon rootstock to increase plant survival.

Mulberry — Fruit of different varieties will be white, black or red. All varieties are either wind-pollinated or do not need to be pollinated at all. Cold hardiness varies among varieties. Spring frost is seldom a problem due to the late-blooming characteristics of mulberry. Birds and squirrels may be a problem with ripe fruit. Fallen fruit will stain sidewalks and driveways, so trees should be planted away from these areas.

Cherries — Tart (sour) cherries do much better in Tennessee than sweet cherries. Cross pollination is not essential with tart cherries. Spring frosts and birds can be major problems.

Pawpaw — Also called the "poor man's banana," the pawpaw is bothered by relatively few pests. Young trees prefer some shade. With age, trees can tolerate higher sunlight levels. Cross pollination is needed.

Screens — Screens may be used to block traffic noise and unsightly areas, to provide privacy and to divide lawns into different areas. Screens established along property lines may be developed into attractive, productive areas through the use of selected fruit crops.

Apples — Trees having dwarf or semi-dwarf rootstocks may be trained to provide screens. Such trees must be supported through the use of a stake or a trellis. This same support system may be used to train trees to desired forms such as espaliers (Figure 1). Choose varieties showing resistance to certain diseases if possible.

Cherry — Shrub or bush types (Nanking) work well. Cross pollination is generally required. Spring frosts may injure or destroy blooms, but not to the same degree as regular cherries.

Elderberry — Plants require little maintenance. Blooms are showy. Fruits may be used for jams, jellies and wines.

Grapes — Trellis type and height may be modified to determine the height of the screen. Their dense foliage provides a good screen during the summer months. Black rot is the major disease problem and is controlled through a combination of cultural practices and fungicide applications. American bunch and French-American hybrid varieties do not need to be cross pollinated. Certain muscadine varieties do need to be cross pollinated from other varieties of muscadines.

Kiwifruit — Hardy kiwifruit rank about the same as figs for cold hardiness. In other words, they are very vulnerable to cold injury during the winter months. They should be planted in only the most protected sites. Trellising will be similar to that used for grapes. In most cases, plants are either male or female. For successful cropping, both types are needed.

Blackberries — Both the thorned and thornless types will work as screens. Most thornless varieties need support. Thorned types and some thornless varieties are self-supporting if properly trained.

Raspberries — Red raspberries produce new canes from root suckers, so over a period of time they will form a solid hedge. Black raspberries form new canes from buds at the base of existing canes, so the plantings may be confined to hills. Support is suggested for red raspberries. With proper training, black raspberries will not need support. Purple raspberries may be handled similarly to either red or black raspberries.

Blueberries — Plants may reach a height of 7 or 8 feet. They require soils that have a pH of about 5.0 to 5.2, which is more acidic than is needed by other types of fruit crops. Therefore, blueberries should not be planted among other types of fruit. Blueberry blossoms are showy and the foliage develops attractive color in the fall.

Currants — For areas receiving full sun to partial shade, consider currants. Fruits can be black, red or white. Black varieties do not need cross pollination, whereas red and white varieties do. Currants are one of the primary hosts for white pine blister rust, so you may want to avoid this crop if you have white pines.

Gooseberries — Gooseberries grow normally in cooler climates, so heavy mulching of the base

of these plants is desirable to keep roots cool. Some shade is permissible, but heavy shade is detrimental to growth and fruiting. Like currants, gooseberries are a host to white pine blister rust.

Figs — Poor winter hardiness is the major problem with figs. Planting against the south side of buildings or mulching heavily will help them survive. Plants that are not injured or killed back to the ground by cold will produce a crop in spring and a second crop in fall.

Arbors — Arbors may provide an attractive, shady spot, as well as support for several types of fruit crops such as grapes and kiwifruit. Pruning is more difficult to perform than with conventional trellises since all the

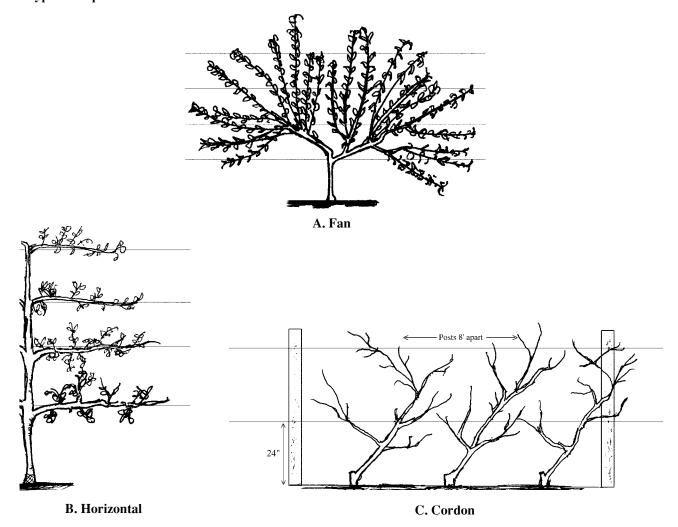
work is overhead. Annual pruning is essential for these crops to maintain consistent yields of quality fruit.

Ground Covers — These plantings are often used to hide areas unsuitable for lawn grasses because of terrain, soil type or inaccessibility. Plants to be used for ground cover usually do not grow more than 1 foot high.

Trailing raspberries, blackberries and dewberries— Trailing types of brambles that usually are trained to a trellis work well as ground covers when no trellis is used. However, yield and quality of fruit will be reduced and harvest will become much more difficult.

Strawberries — June-bearing strawberries produce numerous runner plants and quickly cover an

Figure 1 Types of Espalier Trained Trees



area when favorable growing conditions exist. A good weed control program is essential, as strawberries will not compete favorably with weeds. Annual renovation is necessary to maintain yields. The planting will need to be re-established about every four years.

Border Plants — These plants are usually low-growing and are used in front of taller-growing plants. They provide a distinctive boundary between lawn areas and planted beds. Keep in mind the sunlight requirements of the plants used for borders.

Strawberries — Day-neutral strawberries produce very few runners and maintain their position without spreading. Spring and fall harvests may be expected from day-neutral strawberries. The best varieties for Tennessee appear to be Tristar and Tribute. Yields from these varieties will not be high.

Raised Beds, Pyramids — These structures may be used to give fruit in a small area.

Strawberries — You may gather substantial amounts of fruit by constructing a pyramid. The diameter and height of the pyramid may be modified to allow for planting the desired number of plants.

Keep in mind that all fruit and nut crops have specific growing requirements. Most fruits grow

and fruit best in full sunlight. As shade levels increase, yields and quality decline and pest problems increase. Fruit and nut production requires some different cultural objectives than ornamentals. Poor management yields an undesirable, unsightly, messy plant. Whenever possible, select varieties with resistance to pests.

For further information on specific cultural requirements, contact your county Extension office for the following publications:

- Tree Fruit, Tree Nut and Small Fruit Cultivar Recommendations for Tennessee (PB746)
- Growing Small Fruits in Home Gardens (PB902)
- Renovating Strawberries in the Home Garden (SP284-B)
- Pruning Raspberries and Blackberries in Home Gardens (SP284-G)
- Fertilizing and Liming Fruit Trees (SP307-A)
- Planting Fruit Trees (SP3O7-B)
- Fruit Tree Management Timetable (SP3O7-D)
- Training and Pruning Grapevines (SP3O7-F)
- Figs in the Home Planting (SP307-I)
- Disease and Insect control in Home Fruit Plantings (PB1622)
- Grape Growing in Tennessee (PB1475)

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